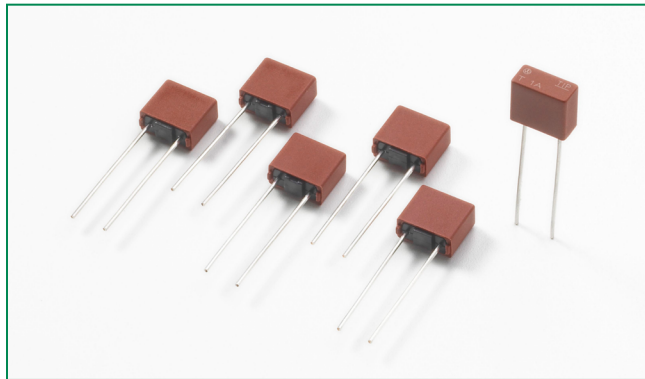


389 Series



Agency Approvals

Agency	Agency File Number	Ampere Range
		60mA

Description

The 389 Series are TR5®, time-lag type, 250V rated fuses. For Short Circuit Protection of Sensitive Electronic Components and Assemblies

Features

- For worldwide applications
- Reduced PCB space requirements
- Highly defined cut-off times
- Irreversible physical separation
- Low internal resistance
- Flame resistant encapsulated casing
- RoHS compliant and Lead-free
- Available for 60mA only

Applications

- Telecom equipment
- Data processing equipment
- Input/output modules
- Household appliances
- Medical equipment

Additional Information



Datasheet



Resources



Samples

Electrical Characteristics

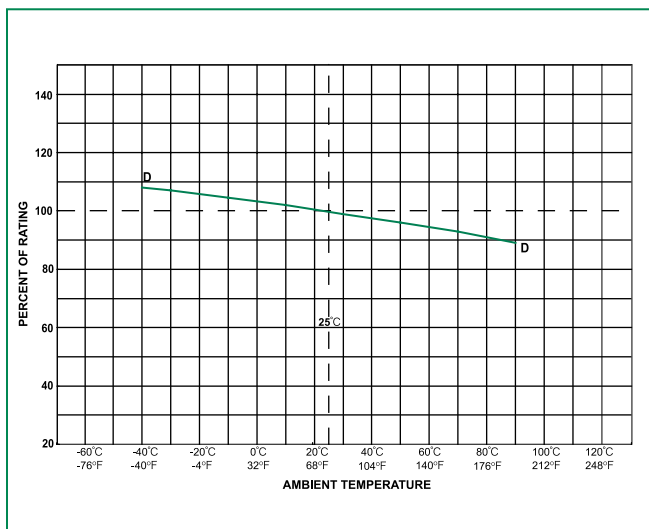
% of Ampere Rating	Opening Time
166	600 ms, Min.
250	45 ms, Max.

Electrical Characteristics

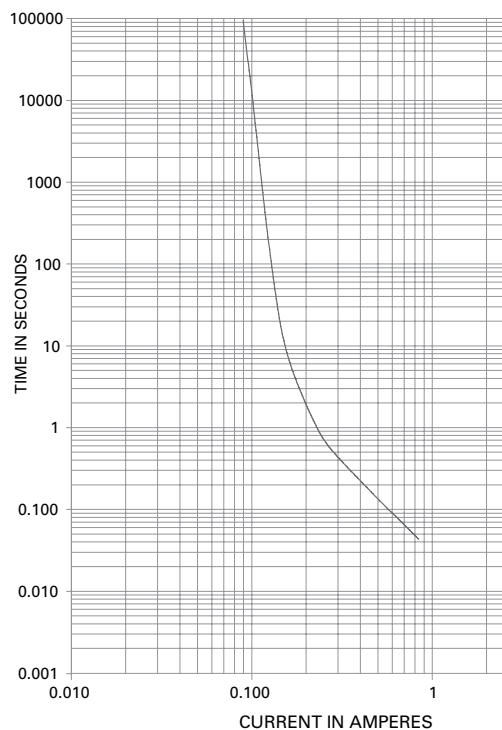
Continuous Current I_C	Type	Amp Code	Voltage Rating	Fault Current max.	Cold Resistance $0.1 \times I_C$ typ. (mΩ)	Power Dissipation $1.0 \times I_C$ max. (mW)	Melting Integral $10 \times I_C$ typ. (A²s)
60mA		0060	250 VAC	10A / 250VAC/DC 50-60 Hz cos φ = 1.0	80	100	0.033

Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

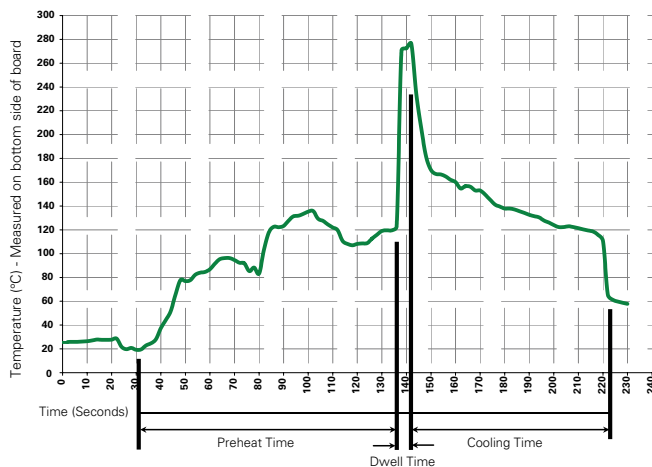
Temperature Derating Curve



Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60–180 seconds
Solder Pot Temperature:	280°C Maximum
Solder Dwell Time:	2–5 seconds

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C ± 5°C
Heating Time: 5 seconds max.

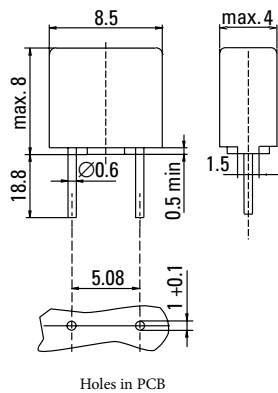
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

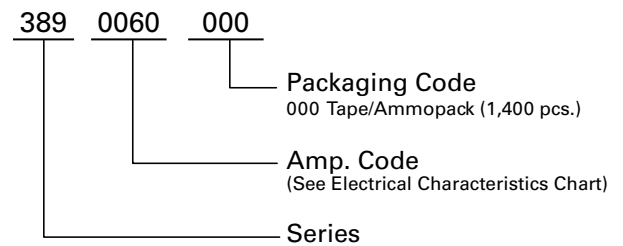
Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10N (EN 60068-2-21)
Solderability	260°C, ≤ 3 sec. (Wave) 350°C, ≤ 1 sec. (Hand)
Soldering Heat Resistance	260°C, 10 sec. (IEC 60068-2-20)

Operating Temperature	–40°C to +85°C (consider de-rating)
Climatic Category	–25°C/+70°C/21 days (EN 60068-1..3)
Stock Conditions	+10°C to +60°C RH, ≤ 75% yearly average, without dew, maximum value for 30 days-95%
Vibration Resistance	24 cycles at 15 min. each (EN 60068-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10 g acceleration

Dimensions



Part Numbering System



Packaging

Packaging Code	Packing Option	Quantity
000	Tape/Ammopack	1400